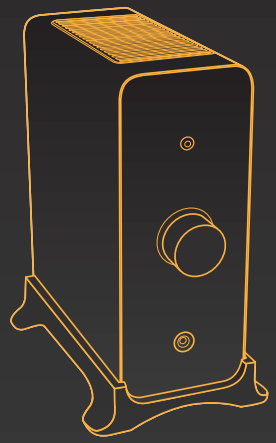
Setup Guide



audioengine N22

www.audioengineusa.com

Premium Desktop Audio Amplifier

audioengine

Audioengine, Ltd.
support@audioengineusa.com
www.audioengineusa.com

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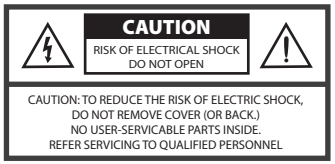
audioengine N22 setup guide

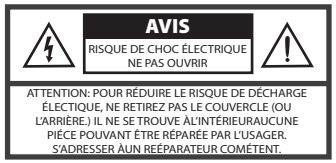
Basic Safety Instructions

- Read these instructions for all components before using this product.
- Keep these instructions for future reference.
- Heed all warnings on the product and in the owner's guide.
- Follow all instructions.
- Do not use this apparatus near water or moisture. Do not use this product near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, or anywhere else that water or moisture are present.
- Clean only with a dry cloth and as directed by the manufacturer. Unplug this product from the wall outlet before cleaning.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. To ensure reliable operation of the product and to protect it from overheating, put the product in a position and location that will not interfere with its proper ventilation. For example, do not place the product on a bed, sofa, or similar surface that may block the ventilation openings. Do not put it in a built-in system, such as a bookcase or a cabinet that may keep air from flowing through its ventilation openings.
- Do not install near any heat sources, such as radiators, heat registers, stoves or other apparatus that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wider blade or third prong are provided for your safety. If the provided plug does not fit in your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments or accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time to prevent damage to this product.
- Refer all servicing to qualified service personnel.
- Servicing is required when the apparatus has been damaged in any way such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please contact the manufacturer to be referred to an authorized service center near you.
- To prevent risk of fire or electric shock, avoid over loading wall outlets, extension cords, or integral convenience receptacles .
- Do not let objects or liquids enter the product as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
- See product enclosure bottom for safety related markings.
- Use Proper Power Sources. Plug the product into a proper power source, as described in the operating instructions or as marked on the product.
- Avoid power lines– Use extreme care when installing an outside antenna system to keep from touching power lines or circuits, as contact with them may be fatal. Do not install external antennas near overhead power lines or other electric light or power circuits, nor where an antenna can fall into such circuits or power lines.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: This device may not cause harmful interference and this device must accept any interference received, including interference that may cause undesired operation.


CAUTION
RISK OF ELECTRICAL SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK.)
NO USER-SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL


AVIS
RISQUE DE CHOC ÉLECTRIQUE
NE PAS OUVRIR
ATTENTION: POUR RÉDUIRE LE RISQUE DE DÉCHARGE
ÉLECTIQUE, NE RETIREZ PAS LE COUVERCLE (OU
L'ARRIÈRE.) IL NE SE TROUVE À L'INTÉRIEURAUCUNE
PIÈCE POUVANT ÊTRE RÉPARÉE PAR L'USAGER.
S'ADRESSER À UN REÉPARATEUR COMÉTENT.

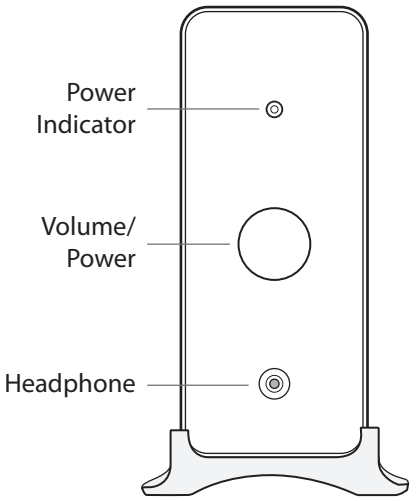
Introduction

Welcome to the Audioengine family and congratulations on your purchase of the Audioengine N22 Premium Desktop Audio Amplifier! The Audioengine team is dedicated to bringing you the highest quality listening experience possible and the Audioengine N22 amplifier was designed with the same attention to detail and operational simplicity as other Audioengine products. As with our other past efforts we thank our customers, distributors and resellers for inspiring us to create another great Audioengine product.

Connect your iPod, computer, and speakers or headphones for a great-sounding personal stereo system with N22. Or plug in an optional Audioengine wireless audio adapter and use N22 to power your home theater rear speakers.

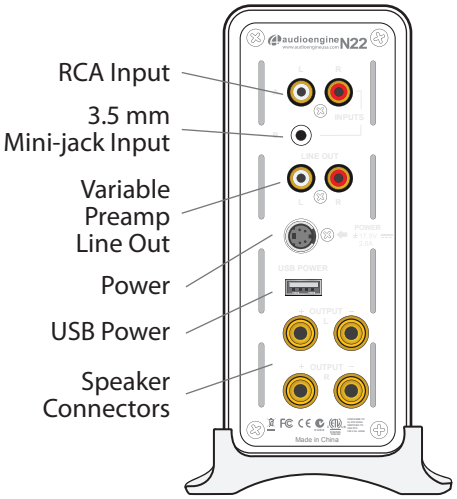
Features

- Powerful but compact stereo audio amplifier
- Cool-running 22 watts RMS per channel
- 2 inputs for iPod, iPhone, computer, TV, etc.
- High-performance headphone amplifier
- Variable preamp output
- Gold-plated speaker connectors
- High-quality analog volume control
- Detachable power cord
- Power-saving idle mode
- Hand-finished MDF wood cabinet
- Integrated vertical stand
- All cables included!
- Recommended speakers: Audioengine P4



What's in the Box

- N22 amplifier with integrated stand
- N22 power supply
- Detachable AC power cord
- ⅛" audio cable, 2 meters (~6.5 ft)
- RCA audio cable, 1 meters (~3.28 ft)
- Speaker wire (16AWG), 1.75 meters (~5.75 ft)
- Cloth amplifier bag
- Cloth power supply bag
- Cloth cable bag
- Setup Guide



Works With

- Audioengine P4 passive speakers
- Audioengine wireless audio adapters
- Desktop computers and laptops (Mac and PC)
- iPods and iPhones
- Headphones
- Rear channel surround speakers
- Any products with mini-jack or RCA audio outputs!

Unpacking

Your Audioengine N22 amplifier was carefully tested and inspected before packaging and shipping. After unpacking please check for any damage. It is rare that any damage occurs during shipping, but if this does happen contact the shipping company immediately. We recommend that you keep the original carton and packing material.

Setup and Operation

Step 1 - Placement

Set the N22 amplifier on a solid surface and make sure there is plenty of ventilation and space around the amplifier top and bottom. The integrated stand is not designed to be removed as the N22 uses a passive convection system for heat dissipation. Keeping your N22 upright with the stand attached is important for optimal ventilation and to keep your N22 running cool.

Step 2 - Connecting the Speaker Wire

The N22 is a stereo power amplifier that will power one pair of passive speakers between 4 and 8 ohms. To connect N22 to your speakers you will need 2-conductor stranded speaker wire, which is included. The N22 uses high quality, five-way gold plated binding posts that will accept heavy gauge bare wire, banana plugs, spade lugs, or pin terminators. If you use your own speaker wire we recommend using at least 16 gauge wire and using the same length of wire from the amplifier to each speaker. It's also a good idea to turn off your amplifier before connecting power, audio sources or speakers.

Preparing the Speaker Wire

① Separate the last 3" of each speaker wire conductor.
② Strip ½" of insulation from the end of each wire.
③ Twist the exposed copper strands with your fingers 3 or 4 times so the strands stay together.

Note: As you make your connections, be sure to connect the positive (+) terminals on your amplifier to the positive (+) terminals on your speakers. Even if your wire does not have (+) or (-) markings, most 2-conductor speaker wire has printing on one side to help you differentiate between the wire pairs.

Using Bare Wire

① Use your thumb and finger to unscrew the binding post connectors on the back of each speaker.

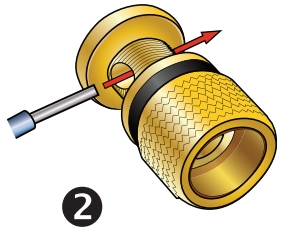
② Insert each speaker wire into the holes on the side of the binding post connectors, observing proper polarity.

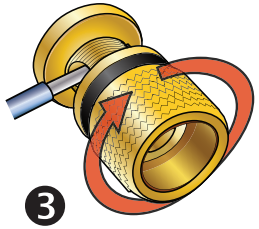
③ Retighten the binding posts with your fingers.

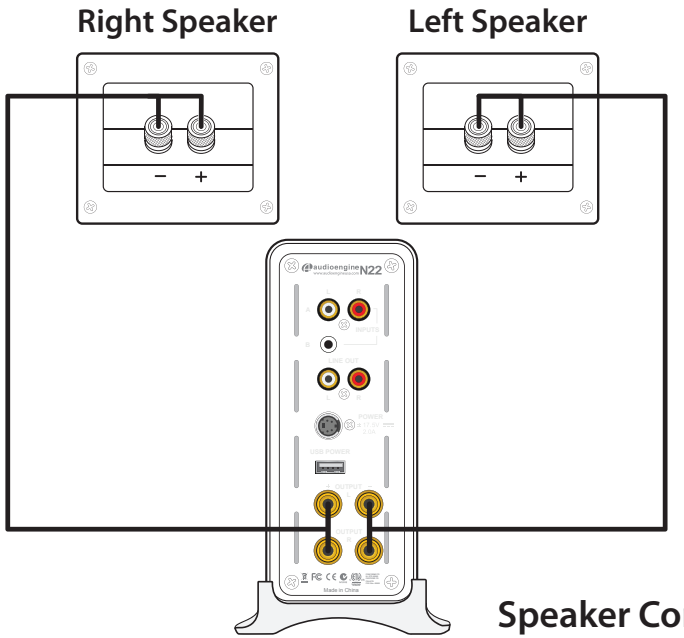
④ The stripped portion of the wire should be secured firmly in each connector.

⑤ Make sure that none of the speaker wire strands have come in contact with an adjoining terminal.

⑥ Repeat steps 1 and 5 to connect speaker wires to the amplifier.







Speaker Connections

Step 3 – Connecting the Power Supply

Be sure that the volume/power switch on the front panel is in the OFF position by rotating it counterclockwise until you hear a click.

Connect the cable with the round end from the power supply to the N22 rear panel power connector. Note that this connector is "keyed" so line up the arrow on the cable end with the arrow on the rear panel. Please do not use excessive force on the connector and use only the power supply provided with the amplifier.

Connect the AC power cable from the power supply to a power outlet and verify that the indicator light on the power supply is illuminated. We recommend using a high-quality surge suppressor and/or AC line filter on all electronics equipment.

Step 4 – Connecting Audio Sources

Using the appropriate audio cable (3.5" mini-jack and/or RCA cable), connect your audio source (computer, iPod, etc.) to the N22 audio inputs. One of each cable type is included with your amplifier.

Step 5 – Operation

Turn on the N22 volume/power knob and set the volume control to an initial setting of about 3 o'clock. The front panel power indicator will be illuminated.

Turn on your audio input source and adjust the volume to your desired listening level.

Note that both audio inputs on the N22 are active so two audio sources may be connected to the amplifier at the same time without the need for an input switch. We recommend using the volume control on each audio source to adjust the overall system volume.

Other Features

Headphone Out - For headphone enthusiasts the N22 includes a high-performance, low-noise headphone amplifier which works well with all types of headphones. Even if you don't connect speakers to your N22 the headphone amplifier will make your iPod or computer sound better through headphones. Keep in mind that permanent hearing loss may occur if earbuds or headphones are used at high volume so be sure to set the volume to a safe level.

Line Out - The N22 includes a variable preamp output so you can connect a subwoofer, external amplifier, or Audioengine wireless adapter and control the volume of the line-out from the front panel.

USB Power - The USB power port allows you to charge and power your iPod, iPhone, Audioengine wireless adapters or any other USB powered product through the USB connector on the rear panel. Note that this is for power only, not USB audio or data transfer.

For a complete list of product features and specifications go to:
www.audioengineusa.com

Cleaning

We don't recommend using any solvents or cleaners on Audioengine amplifiers, cabinets, or speakers. Just wipe down with a soft, dry cloth.

Troubleshooting

Power supply indicator is not illuminated	• Check to see that the AC power cord is securely connected to the power supply and to an AC power outlet. • Check that the AC power outlet is supplying power.
No Sound	• Recheck speaker wire connections from the amplifier to each speaker. • Verify that the amplifier and your source components are turned on. • Check that the AC wall outlet is on and working. • Check that the cable from the power supply is connected to the N22 and the power supply indicator is lit. • Check that the volume/power knob on the front panel is turned on and not set to minimum volume. • Check that your audio sources (iPod, computer, etc) are turned on and not set to minimum volume. • Check that the cables from your audio sources are working and are properly connected.
Sound through one speaker only	• Recheck all speaker wire connections on the speakers and the amplifier. • Check that the cables from your audio sources to the amplifier are properly connected. • If using a computer, verify that the audio output balance setting is centered.
Lack of bass or poor imaging	• Check the polarity of the speaker wires on the amplifier and both speakers. • Check the EQ or sound settings on your audio source.
Sound Distorted	• Decrease the volume of the input audio source and increase the volume of the amplifier.

Hum

Adding a new component such as your N22 amplifier can bring out hum or buzz that may not have existed before. Your first assumption may be that something is wrong with the component but this is generally caused by a "ground-loop" in your system. Consider these tips for possible solutions:

- First try moving all components to the same electrical circuit or AC outlet.
- If the hum or buzz is still present, power off all gear and remove the mini-jack and/or RCA audio cables to and from the N22 amplifier.
- Turn the N22 back on and check for hum. If the noise is still audible try plugging the N22 power cable into a different AC outlet.
- If the hum goes away while the audio cables are still disconnected, the noise is likely coming from another component in your system. Connect each component back one at a time and the one that causes the system to hum is likely the culprit.
- A common ground-loop source is from cable TV or satellite cables. If the hum or buzz persists after trying the previous tips, disconnect the coaxial cable from your cable box, TV, or DVR and if the hum goes away the cable is the cause. In this case you can get a ground-loop isolator from your local electronics store. These are inexpensive and easy to connect inline with your video cable.
- Sometimes something as simple as a portable heater or dehumidifier will add noise into your wall wiring that could be picked up by your audio gear. A dimmer switch on a halogen lamp, a wireless internet router, or wireless phone near the amplifier, for example, could also all be possible culprits.

The best overall solutions are to use an AC line filter, plug the unit into a different AC circuit, or in the case of noise introduced by a wireless router, for example, move it further away from your audio gear.

Warranty

Period
All Audioengine products have a 3-year Limited Warranty on parts and labor from date of purchase. Your warranty is automatic so there is no need to register. This Limited Warranty applies only to Audioengine products purchased in the Continental United States. For Limited Warranty coverage elsewhere please contact your Audioengine dealer, reseller, or distributor.

What is covered
All defective parts or faulty workmanship.

What is not covered
The Audioengine Limited Warranty does not cover damage caused by accident, misuse, abuse, neglect, excessive moisture, lightning, power surges, other acts of nature, unauthorized product modification or repairs, or failure to follow the instructions outlined in the Setup Guide.

What we will do
We will repair or replace any defective parts, at our option, within a reasonable amount of time and free of charge any time during the warranty period. After service, we will be responsible for shipping the product back to you at our expense.

What we ask from you
You will be responsible for shipping or transportation charges directly to Audioengine or to an authorized dealer. We recommend that you keep the original shipping materials, as it is important that you package the product so that it will not be damaged during shipping. Audioengine cannot be responsible for any damages incurred during shipping due to poor packing, so please pack well and make sure to insure your shipment.

How to obtain Audioengine Warranty service
If you have any questions about your warranty coverage or you think you may need service, email the Audioengine Authorized Service Center at: support@audioengineusa.com or call toll-free in the United States at: (877) 853-4447. We will do everything we can to answer your questions and resolve any issues as quickly as possible.

Exclusive Remedy
This Limited Warranty is fully transferable provided that the current owner furnishes the original proof of purchase and that the serial number on the product is intact. THE MAXIMUM LIABILITY OF AUDIOENGINE SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID BY YOU FOR THE PRODUCT. IN NO EVENT SHALL AUDIOENGINE BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES.

Product Returns and Refunds
Your satisfaction is guaranteed! Should you have a problem or are not satisfied with any Audioengine product, send us an email at: support@audioengineusa.com or call toll-free in the United States at: (877) 853-4447.

Contact Us

If you have any questions or feel you may need service contact the reseller where you purchased your product or feel free to email us directly at: support@audioengineusa.com or call toll-free in the United States:
(877) 853-4447

About Audioengine

Audioengine designs and builds innovative audio products with all your music in mind. Great sound, simple but elegant designs, high-quality materials, and truly useful features are what Audioengine is all about. We sincerely hope you get as much enjoyment from our products as we've had creating them! For information about our other products go to:

www.audioengineusa.com

Information for Users on Disposal of Old Equipment

[European Union]

Attention:
This symbol is only valid in the European Union.

This symbol indicates that the electrical and electronic equipment should not be disposed as general household waste at its end-of-life. Instead, the product should be handed over to the applicable collection point for the recycling in accordance with your national legislation. By disposing of this product correctly, you will help to conserve natural resources and will help prevent potential negative effects on the environment and human health that could otherwise be caused by inappropriate waste handling of this product. For more information about collection point and recycling of this product, please contact your local municipal office, your household waste disposal service or the shop where you purchased the product. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

[Other Countries outside the European Union]

If you wish to dispose of this product, please do so in accordance with applicable national legislation or other rules in your country for the treatment of old electrical and electronic equipment.

audioengine N22 setup guide